ABSTRACT OF THE DISCLOSURE

An integrated circuit for sampling outputs representing a pixel value comprises two first variable capacitors each having a variable range of capacitance and each for receiving the voltage representing the pixel value; two first transistors respectively connected electrically to each of the first variable capacitors for transferring the voltage to each of the variable capacitors; and a second transistor connected electrically to each of the first variable capacitors for transferring the voltage from each of the first variable capacitors.